

Title (en)  
FORMING CONTACTS ON DIAMONDS

Publication  
**EP 0250252 B1 19911211 (EN)**

Application  
**EP 87305451 A 19870619**

Priority  
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Abstract (en)  
[origin: EP0250252A1] The invention provides a method of preparing a detector which is sensitive to ionising radiation or atomic emissions. The method includes the steps of forming at least two discrete conductive regions (10, 12) on a counting diamond (14) by ion implantation, at a temperature below 500 DEG C. Subsequently, contacts (16, 18) are applied to the conductive regions to allow charged carriers liberated by the radiation to be detected by an electronic circuit. The invention extends to a detector prepared according to the method. An example of a detector according to the invention comprised a synthetic diamond having a paramagnetic nitrogen impurity concentration of less than 150 parts per million. Two conductive regions were formed on the diamond by bombardment with carbon ions, and contacts were formed on the conductive regions by the applications of silver-loaded epoxy paint.

IPC 1-7  
**G01T 1/26**; **H01L 31/02**

IPC 8 full level  
**H01L 31/09** (2006.01); **C01B 31/06** (2006.01); **G01T 1/02** (2006.01); **G01T 1/16** (2006.01); **G01T 1/24** (2006.01); **G01T 1/26** (2006.01); **H01L 21/04** (2006.01); **H01L 31/00** (2006.01); **H01L 31/02** (2006.01); **H01L 31/0224** (2006.01); **H05K 1/03** (2006.01); **H05K 3/10** (2006.01)

IPC 8 main group level  
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Cited by  
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